CLAIMS

1. A method for manufacturing carbon-bonded refractory products from refractory granulations and organic binder agents, **characterised in** that a powdery, graphitable coal-tar pitch with a benzo[a]pyrene content less than 500 mg/kg and a coking value of at least about 80% by weight according to DIN 51905 and a graphitable binder agent liquid at room temperature, with a coking value of at least about 15% by weight and a benzo[a]pyrene content less than 500 ppm according to DIN 51905, are used as organic binder agent, mixed with the remaining constituents, transferred to a moulded body, then heat treated at a temperature of 150 to about 400 °C.

2. The method according to Claim 1, **characterised** in that 0.5 to about 4% by weight, in particular 1 to 2.5% by weight of high temperature binder, and 1.3 to about 4% by weight, in particular 2 to 3% by weight of liquid binder agent, related in each case to the total weight of the refractory mixture, are used as organic binder agent.

3 The method according to Claim 1 or 2, **characterised in** that coal-tar pitch is obtainable by distillation of coal tar in a first distillation stage, under normal or reduced pressure, and distillation of the residue of the first distillation stage under a pressure of no more than 1 mbar in an evaporator, wherein the temperature in the evaporator ranges from 300 to 380 °C, and the mean residence time of the residue is 2 to 10 minutes.

4 The method according to any one of Claims 1 to 3, **characterised in** that a solution of the coal-tar pitch according to Claim 3 in an anthracene oil is used.

5. The method according to any one Claims 1 to 4, **characterised in** that the powdery coal-tar pitch is used in the form of a powder with a mean grain size of 10 to about 500 µm.

6. The method according to any one of Claims 1 to 5, **characterised in** that the powdery coal-tar pitch has a softening point of over about 180 °C.

7. The method according to any one of Claims 1 to 6, **characterised in** that a naphthenic oil, which does not dissolve the pitch, is added as dust binder to the powdery coal-tar pitch before mixing with the liquid binder agent.

8. The method according to Claim 1, **characterised in** that a carbon carrier, in particular graphite and/or carbon black, is added to the mixture of refractory granulations and organic binder agent before working.

9. Refractory product with graphite-like carbon structure obtainable through a process according to one of claims 1 to 7 having a content of benzo[a]pyrene of less than 50 mg/kg.